IN THE CLAIMS

Cancel claims 1-21 without prejudice.

Please add the following new claims:

--22. A wireless LAN comprising:

a plurality of hub transceivers coupled together to constitute a plurality of data sources and destinations; and

a plurality of mobile transceivers each coupled to data processing means and between each said data processing means and a corresponding said transceiver data passes to be transmitted or received, said transceivers being for data transceiving operation by radio transmissions to one of said hub receivers in a confined multipath environment, and each transceiver comprising: antenna means coupled to transmission signal processing means and to reception signal processing means, said transmission signal processing means in turn coupled to an input data channel, and said reception signal processing means in turn coupled to an output data channel, each said transceiver being operable to transmit and receive data at radio frequencies in excess of 10 GHz, and said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths.--

--~~23~~. A wireless LAN as claimed in claim ~~22~~, wherein said transmission signal processing means further comprises means to provide data reliability enhancement to said input data passed to said modulation means.--

--~~24~~. A wireless LAN as claimed in claim ~~23~~, wherein said data reliability enhancement is Forward Error Correction.--

--~~25~~. A wireless LAN as claimed in claim ~~24~~, wherein said transmission signal processing means further comprises means, interposed between said data reliability enhancement means and said modulation means, for interleaving blocks of said input data.--

--~~26~~. A wireless LAN as claimed in claim ~~25~~, wherein said blocks of said input data are bits.--

--~~27~~. A wireless LAN as claimed in claim ~~22~~, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~28~~. A wireless LAN as claimed in claim ~~27~~, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~29~~. A wireless LAN as claimed in claim ~~22~~, wherein said reception signal processing means comprises demodulation means for demodulating received symbols of said plurality of sub-channels into output data for said output data channel.--

--~~30~~ 9. A wireless LAN as claimed in claim ~~22~~ 1, further comprising switching means for selectively coupling said antenna means to said transmission signal processing means for transmission of data and to said reception signal processing means for reception of data.--

--~~31~~ 10. A wireless LAN comprising:

a plurality of hub transceivers coupled together to constitute a plurality of data sources and destinations; and

a plurality of mobile transceivers each coupled to data processing means and between each said data processing means and a corresponding said transceiver data passes to be transmitted or received, said transceivers being for data transceiving operation by radio transmissions to one of said hub receivers in a confined multipath environment, and each transceiver comprising: antenna means coupled to transmission signal processing means and to reception signal processing means, said transmission signal processing means in turn coupled to a input data channel, and said reception signal processing means in turn coupled to a output data channel, each said transceiver being operable to transmit and receive data at radio frequencies, said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of

significant ones of non-direct transmission paths, means to apply a data reliability enhancement to said data passed to said modulation means and means, interposed between said data reliability enhancement means and said ensemble modulation means, for interleaving blocks of said data.--

--~~32~~ 11. A wireless LAN as claimed in claim ~~31~~ 10, wherein said data reliability enhancement is Forward Error Correction.--

--~~33~~ 12. A wireless LAN as claimed in claim ~~32~~ 11, wherein said blocks of said input data are bits.--

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--~~34~~ 13. A wireless LAN as claimed in claim ~~31~~ 10, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~35~~ 14. A wireless LAN as claimed in claim ~~34~~ 13, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~36~~ 15. A wireless LAN as claimed in claim ~~31~~ 10, wherein said reception signal processing means comprises demodulation means for demodulating received symbols of said plurality of sub-channels into output data for said output data channel.--

--~~37~~ 16. A wireless LAN as claimed in claim ~~31~~ 10, further comprising switching means for selectively coupling said antenna means to said transmission signal processing means for

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transmission of data and to said reception signal processing means for reception of data.--

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--~~38~~. A peer-to-peer wireless LAN comprising:

a plurality of mobile transceivers for data transceiving operation by radio transmissions between ones thereof in a confined multipath environment, each said transceiver being coupled to a data processing means, and between each said data processing means and a corresponding said transceiver data passes to be transmitted or received, each said transceiver comprising: antenna means coupled to transmission signal processing means and to reception signal processing means, said transmission signal processing means in turn coupled to an input data channel, and said reception signal processing means in turn coupled to an output data channel, each said transceiver being operable to transmit and receive data at radio frequencies in excess of 10 GHz, and said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths.--

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--~~39~~. A peer-to-peer wireless LAN as claimed in claim
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~~38~~, wherein said transmission signal processing means further

comprises means to provide data reliability enhancement to said input data passed to said modulation means.--

--19. A peer-to-peer wireless LAN as claimed in claim 18, wherein said data reliability enhancement is Forward Error Correction.--

--20. A peer-to-peer wireless LAN as claimed in claim 19, wherein said transmission signal processing means further comprises means, interposed between said data reliability enhancement means and said modulation means, for interleaving blocks of said input data.--

--21. A peer-to-peer wireless LAN as claimed in claim 20, wherein said blocks of said data are bits.--

--22. A peer-to-peer wireless LAN as claimed in claim 17, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--23. A peer-to-peer wireless LAN as claimed in claim 22, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--24. A peer-to-peer wireless LAN as claimed in claim 17, wherein said reception signal processing means comprises demodulation means for demodulating received symbols of said plurality of sub-channels into output data for said output data channel.--

--~~46~~ 25. A peer-to-peer wireless LAN as claimed in claim ~~38~~ 17, further comprising switching means for selectively coupling said antenna means to said transmission signal processing means for transmission of data and to said reception signal processing means for reception of data.--

--~~47~~ 26. A peer-to-peer wireless LAN comprising:

a plurality of mobile transceivers for data transceiving operation by radio transmissions between ones thereof in a confined multipath environment, each said transceiver being coupled to a data processing means, and between each said data processing means and a corresponding said transceiver data passes to be transmitted or received, each said transceiver comprising: antenna means coupled to transmission signal processing means and to reception signal processing means, said transmission signal processing means in turn coupled to an input data channel, and said reception signal processing means in turn coupled to an output data channel, each said transceiver being operable to transmit and receive data at radio frequencies, said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths, means to apply data reliability enhancement to said data passed to said ensemble

modulation means and means, interposed between said data reliability enhancement means and said ensemble modulation means, for interleaving blocks of said data.--

--~~48~~ 27. A peer-to-peer LAN as claimed in claim ~~47~~ 26, wherein said data reliability enhancement is Forward Error Correction.--

--~~49~~ 28. A peer-to-peer LAN as claimed in claim ~~48~~ 27, wherein said blocks of said input data are bits.--

--~~50~~ 29. A peer-to-peer LAN as claimed in claim ~~47~~ 26, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~51~~ 30. A peer-to-peer LAN as claimed in claim ~~50~~ 29, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~52~~ 31. A peer-to-peer wireless LAN as claimed in claim ~~47~~ 26, wherein said reception signal processing means comprises demodulation means for demodulating received symbols of said plurality of sub-channels into output data for said output data channel.--

--~~53~~ 32. A peer-to-peer wireless LAN as claimed in claim ~~47~~ 26, further comprising switching means for selectively coupling said antenna means to said transmission signal processing means

for transmission of data and to said reception signal processing means for reception of data.--

--~~54~~ 53. A transceiver for operation in a confined multipath transmission environment, said transceiver comprising antenna means coupled to transmission signal processing means and to reception signal processing means, said transmission signal processing means in turn coupled to an input data channel, and said reception signal processing means in turn coupled to an output data channel, said transceiver being operable to transmit and receive data at radio frequencies in excess of 10 GHz, and said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths.--

--~~55~~ 54. A transceiver as claimed in claim ~~54~~ 53, wherein said transmission signal processing means further comprises means to provide data reliability enhancement to said input data passed to said modulation means.--

--~~56~~ 55. A transceiver as claimed in claim ~~55~~ 54, wherein said data reliability enhancement is Forward Error Correction.--

--~~57~~ 56. A transceiver as claimed in claim ~~56~~ 55, wherein said transmission signal processing means further comprises means, interposed between said input data reliability enhancement

means and said modulation means, for interleaving blocks of said data.--

--~~58~~ 37. A transceiver as claimed in claim ~~57~~ 36, wherein said blocks of said data are bits.--

--~~59~~ 38. A transceiver as claimed in claim ~~54~~ 33, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~60~~ 39. A transceiver as claimed in claim ~~59~~ 38, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~61~~ 40. A transceiver as claimed in claim ~~54~~ 33, wherein said reception signal processing means comprises demodulation means for demodulating received symbols of said plurality of sub-channels into output data for said output data channel.--

--~~62~~ 41. A transceiver as claimed in claim ~~54~~ 33, further comprising switching means for selectively coupling said antenna means to said transmission signal processing means for transmission of data and to said reception signal processing means for reception of data.--

--~~63~~ 42. A transceiver for operation in a confined multipath transmission environment, said transceiver comprising antenna means coupled to transmission signal processing means and to reception signal processing means, said transmission signal

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processing means in turn coupled to an input data channel, and said reception signal processing means in turn coupled to an output data channel, said transceiver being operable to transmit and receive data at radio frequencies, said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths, means to apply data reliability enhancement to said data passed to said modulation means and means, interposed between said data reliability enhancement means and said modulation means, for interleaving blocks of said data.--

--~~64~~ 43. A transceiver as claimed in claim ~~63~~ 42, wherein said data reliability enhancement is Forward Error Correction.--

--~~65~~ 44. A transceiver as claimed in claim ~~64~~ 43, wherein said blocks of said input data are bits.--

--~~66~~ 45. A transceiver as claimed in claim ~~63~~ 42, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~67~~ 46. A transceiver as claimed in claim ~~66~~ 45, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift

keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~68~~ 47. A transceiver as claimed in claim ~~63~~ 42, wherein said reception signal processing means comprises ensemble demodulation means for demodulating received symbols of said plurality of sub-channels into data for said output data channel.--

--~~69~~ 48. A transceiver as claimed in claim ~~63~~ 42, further comprising switching means for selectively coupling said antenna means to said transmission signal processing means for transmission of data and to said reception signal processing means for reception of data.--

--~~70~~ 49. A transmitter for operation in a confined multipath transmission environment, said transmitter comprising antenna means coupled to transmission signal processing means in turn coupled to an input data channel, said transmitter being operable to transmit data at radio frequencies in excess of 10 GHz, and said transmission signal processing means comprising modulation means for modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths.--

--~~71~~ 50. A transmitter as claimed in claim ~~70~~ 49, wherein said transmission signal processing means further comprises means

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to provide data reliability enhancement to said data passed to said modulation means.--

--~~72~~ 51. A transmitter as claimed in claim ~~71~~ 50, wherein said data reliability enhancement is Forward Error Correction.--

--~~73~~ 52. A transmitter as claimed in claim ~~72~~ 51, wherein said transmission signal processing means further comprises means, interposed between said data reliability enhancement means and said modulation means, for interleaving blocks of said data.--

--~~74~~ 53. A transmitter as claimed in claim ~~73~~ 52, wherein said blocks of said input data are bits.--

--~~75~~ 54. A transmitter as claimed in claim ~~70~~ 49, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~76~~ 55. A transmitter as claimed in claim ~~75~~ 54, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~77~~ 56. A transmitter for operation in a confined multipath transmission environment, said transmitter comprising antenna means coupled to transmission signal processing means in turn coupled to an input data channel, said transmitter being operable to transmit data at radio frequencies, said transmission signal processing means comprising modulation means for

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modulating input data of said input data channel into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths, means to apply data reliability enhancement to said data passed to said modulation means and means, interposed between said data reliability enhancement means and said modulation means, for interleaving blocks of said data.--

--~~78~~ 57. A transmitter as claimed in claim ~~77~~ 56, wherein said data reliability enhancement is Forward Error Correction.--

--~~79~~ 58. A transmitter as claimed in claim ~~78~~ 57, wherein said blocks of said input data are bits.--

--~~80~~ 59. A transmitter as claimed in claim ~~77~~ 56, wherein said modulation means performs, for each said sub-channel, multi-level amplitude and/or phase modulation (mQAM).--

--~~81~~ 60. A transmitter as claimed in claim ~~80~~ 59, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~82~~ 61. A method for transmitting data in a confined multipath transmission environment at radio frequencies in excess of 10 GHz, said data being provided by an input data channel

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coupled to transmission signal processing means in turn coupled to antenna means, said method comprising the steps of:

modulating said data, by modulation means of said transmission signal processing means, into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of the time delay of significant ones of non-direct transmission paths; and

transmitting, by said antenna means, said sub-channel symbols at said radio frequencies in excess of 10 GHz.--

--~~83~~ 62. A method as claimed in claim ~~82~~ 61, comprising the further step of providing data reliability enhancement to said data in advance of said modulation step.--

--~~84~~ 63. A method as claimed in claim ~~83~~ 62, wherein said data reliability enhancement is Forward Error Correction.--

--~~85~~ 64. A method as claimed in claim ~~84~~ 63, comprising the further step of interleaving blocks of said input data between the steps of providing data reliability enhancement monitoring and step of modulation.--

--~~86~~ 65. A method as claimed in claim ~~85~~ 64, wherein said blocks of input data are bits.--

--~~87~~ 66. A method as claimed in claim ~~82~~ 61, wherein said step of modulation is multi-level amplitude and/or phase modulation (mQAM).--

--~~88~~ 67. A method as claimed in claim ~~87~~ 66, wherein said mQAM modulation is one of: multi-level amplitude phase shift keying (mASK), permutation modulation, binary phase shift keying (BPSK), multi-level phase shift keying (mPSK) and multi-level amplitude phase keying (mAPK).--

--~~89~~ 68. A method for transmitting data in a confined multipath transmission environment of radio frequencies, said data being provided by an input data channel coupled to transmission signal processing means in turn coupled to antenna means, said method comprising the steps of:

applying data reliability enhancement to said data;

interleaving blocks of said enhanced data;

modulating said data, by modulation means of said transmission signal processing means, into a plurality of sub-channels comprised of a sequence of data symbols such that the period of a sub-channel symbol is longer than a predetermined period representative of significant ones of non-direct transmission paths; and

transmitting, by said antenna means, said sub-channel symbols.--

--~~90~~ 69. A method as claimed in claim ~~89~~ 68, wherein said data reliability enhancement is Forward Error Correction.--

--~~91~~ 70. A method as claimed in claim ~~90~~ 69, wherein said blocks of input data are bits.--

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